

What is claimed is:

1. A mold comprising a polymer gel body which defines a preselected shape so that a flowable composition may be formed into said preselected shape via contact with said mold.
2. A mold in accordance with claim 1 wherein said polymer gel further comprises at least one of the group consisting of a gel produced by vinyl polymerization of at least one monomer, a gel produced by condensation polymerization of at least one monomer, a gel produced from a solution of at least one naturally occurring polymer, and a gel produced from a solution of at least one synthetic polymer.
3. A mold in accordance with claim 2 wherein said polymer gel produced by vinyl polymerization of monomers comprises at least one of the group consisting of a gel made by polymerizing at least one monofunctional vinyl monomer and at least one multifunctional vinyl monomer, a gel made by polymerizing at least one multifunctional vinyl monomer, a gel made by polymerizing hydroxymethylacrylamide in H_2O , and a gel made by polymerizing hydroxymethylacrylamide and a water-soluble comonomer in H_2O .
4. A mold in accordance with claim 2 wherein said polymer gel produced by condensation polymerization of a monomer comprises at least one polymer system selected from the group consisting of epoxies, urethanes, phenolics, furans, and melamines.
5. A mold in accordance with claim 2 wherein said polymer gel produced from a solution of a natural polymer comprises at least one polysaccharide.
6. A mold in accordance with claim 5 wherein said polysaccharide comprises at least one of the group consisting of agar, xanthan gum, starch, and locust bean gum.
7. A mold in accordance with claim 2 wherein said polymer gel produced from a solution of a natural polymer comprises at least one protein.

8. A mold in accordance with claim 7 wherein said protein comprises at least one protein selected from the group consisting of gelatin and albumin.
9. A mold in accordance with claim 2 wherein said polymer gel produced from a solution of a synthetic polymer comprises at least one polymer selected from the group consisting of cellulose, a cellulose derivative, poly (vinyl alcohol), poly (acrylic acid), and poly (acrylamide).
10. A mold in accordance with claim 1 wherein said polymer gel body further comprises a reinforcement material.
11. A mold in accordance with claim 10 wherein said reinforcement material further comprises at least one of the group consisting of particles, plates and fibers.